IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

WSOU INVESTMENTS, LLC d/b/a BRAZOS LICENSING AND DEVELOPMENT,

Plaintiff,

v.

DELL TECHNOLOGIES INC., DELL INC., EMC CORPORATION, AND VMWARE, INC.,

Defendants.

Case No. 6:20-cv-00486-ADA

JURY TRIAL DEMANDED

DEFENDANTS' RULE 12(c) MOTION FOR JUDGMENT ON THE BASIS OF INELIGIBILITY UNDER 35 U.S.C. § 101 OF U.S. PATENT NO. 7,092,360

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TABLE OF ABBREVIATIONS

Abbreviation	Term
'360 patent	U.S. Patent No. 7,092,360
Asserted Claims	Claims 1, 2, 21, 22, 23, 26, 28, 29, 41, 43, and 44 of the '360 patent
Defendants	Dell Technologies Inc., Dell Inc., EMC Corporation, and VMware, Inc.
First Amended Complaint	First Amended Complaint for Patent Infringement (D.I. 35)
Original Complaint	Original Claim for Patent Infringement (D.I. 1)
WSOU	WSOU Investments, LLC d/b/a Brazos Licensing and Development

TABLE OF EXHIBITS

Exhibit	Document
A	'360 patent
В	U.S. Patent No. 6,173,325
С	WSOU's January 6, 2021 Identification of Terms for Claim Construction
D	WSOU January 20, 2021 Preliminary Claim Constructions
Е	U.S. Patent No. 6,028,847
F	U.S. Patent No. 6,018,527
G	U.S. Patent No. 6,449,255

Pursuant to Rule 12(c) of the Federal Rules of Civil Procedure, Defendants respectfully request that judgment on the pleadings be granted in favor of Defendants on the basis that the Asserted Claims of the '360 patent are not patent-eligible under 35 U.S.C. § 101.

I. INTRODUCTION

The Asserted Claims are not patent-eligible under 35 U.S.C. § 101 because the claims are directed to nothing more than the abstract idea of comparing a detected state with an expected state for monitoring purposes. The Federal Circuit and other courts repeatedly have held ineligible claims that were directed to the same abstract concept of monitoring, and that recited the same basic functions of collecting, analyzing, and outputting information. See, e.g., In re Gale, 856 F. App'x 887, 888–89 (Fed. Cir. 2021) ("monitoring" a "critical test result message management system," by comparing the system's "calculated usage pattern" with a "pre-defined usage pattern requirement" and "reporting the results" of the comparison); Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1351–52 (Fed. Cir. 2016) ("systems and methods for performing real-time performance monitoring of an electric power grid"). The Asserted Claims require no specific technological improvements to perform these basic functions. None of the claims recite specific requirements for performing the functions any differently from how they would be carried out in the human mind or with pencil and paper. The claims merely implement this abstract idea in the context of monitoring a software program; namely, as recited in the claims, a "computer generated model" of a scheduler.

In addition, the Asserted Claims lack any inventive concept that could amount to "significantly more" than this abstract idea because they recite only well-known components functioning in their routine manner to implement the abstract idea. Indeed, the Court's *Markman* order and WSOU's own claim construction arguments confirm that the claims involve nothing more than generic or black-box components, such as a "module" or "element" for receiving

information, with no concrete structure or specific algorithm required. WSOU offered no contrary allegations in either its Original or First Amended Complaints. The claims therefore are patentineligible and judgment on the pleadings should be granted on this basis.

II. BACKGROUND

A. The '360 Patent

The '360 patent relates to "monitoring [the] operation of a scheduler." Ex. A ('360 patent), 1:8–9, 2:28–30, 6:22–25, 6:45–52, 6:64–67. The specification makes clear that a "scheduler" itself was known in the art. The scheduler is part of a "typical switching element for a communication network" and is "responsible for determining the order of queues from which data cells are transferred to the output interface for transmission onto the network." *Id.* at 1:13–29. The specification further acknowledges that "[v]arious methods ha[d] been proposed to test the performance of" such a scheduler, "either when implemented as a software model . . . or when implemented in hardware," and even identifies one such prior art method as an example. *Id.* at 1:33–55 (citing Ex. B (U.S. Patent No. 6,173,325)).

The Asserted Claims, which issued years before the Supreme Court's ruling in *Alice Corporation v. CLS Bank International*, 134 S. Ct. 2347 (2014), recite that the monitoring of a scheduler is achieved by "comparing [a] monitored state with an expected state for" a scheduler "element," and then "outputting the result of the comparison." *See, e.g.*, Ex. A ('360 patent), 16:8–22. For instance, claim 26 recites:

A method of *monitoring operation of a scheduler*, comprising supplying said scheduler with data, *monitoring* the state of an element of said scheduler, *comparing* the monitored state with an expected state for said element, and *outputting* the result of the comparison;

wherein said scheduler comprises a computer generated model; and

wherein said scheduler is controlling the departure of data from a plurality of queues, and said element comprises:

an element for recording whether a queue is empty or occupied, an element for recording the quantity of data contained in a queue, an element identifying a queue from which data is to be output, and an element identifying a group of queues from which data is to be output.

 $Id.^1$

As shown above, claim 26 does not specify precisely *how* to perform the claimed "monitoring," "comparing," and "outputting" functions. The claim does not even specify *who* or *what* performs these functions. Nor does the claim recite requirements for performing the functions any differently from how they would be carried out in the human mind or with a pencil and paper. In fact, claim 26 does not recite any particular technology or components necessary to carry out those functions. Nor does the claim require any improvements or modifications to the monitored scheduler itself. As mentioned above, the specification acknowledges that a scheduler was known to be "responsible for determining the order of queues from which data" is output "onto the network." *Id.* at 1:26–29. In addition, as further discussed below, the specification cites several prior art references that describe this well-known scheduler technology, including generic scheduler "elements" that identify information about data queues, *e.g.*, whether they are empty or occupied, the quantity of data in them, and the order of queues from which data is to be output. *See infra* § IV(C). Even WSOU conceded at claim construction that these "elements" involve no more than basic "data storage." *See infra* § IV(A).

Claim 26 also recites that the scheduler "comprises a computer generated model." But the specification makes clear that schedulers had already been "implemented" *and* "test[ed]" "as a software model." Ex. A ('360 patent), 1:33–36. Neither the claim nor the specification purports to have invented a scheduler as a "computer generated model" in software. The specification

¹ For the remainder of this brief, all emphasis in quotations is added except where noted.

simply states that the "scheduler may be implemented and tested as" a basic "computer model" using known code and "Verilog programming language." *Id.* at 12:53–56, 4:7–9.

The remaining Asserted Claims recite no meaningfully different limitations that would materially alter the eligibility analysis. WSOU asserts dependent claims 28, 29, 41, 43, and 44, which ultimately depend from independent claim 26, and merely recite basic limitations directed to the same process of monitoring scheduler operation. For instance, claims 28 and 29 recite "monitoring a parameter relating to the operation of said scheduler" and "determining an expected value" for the parameter. *Id.* at 16:30–39. Claim 41 merely adds "monitoring" the parameter at "successive times." *Id.* at 18:3–6.

WSOU also asserts claims 1, 2, and 21–23, but these claims just recite a "monitor" performing the monitoring functions discussed above. For example, independent claim 1 involves the same comparison of monitored ("detected") and expected ("predetermined") states. *Id.* at 13:9–26. Claim 21 involves performing the comparison at "different times." *Id.* at 15:32–41. Even these claims, however, do not require the "monitor" to operate in any particular way to carry out the recited monitoring functions, let alone any differently from how they would be performed in the human mind.

B. Procedural Background

WSOU filed its First Amended Complaint on October 19, 2020, asserting infringement of at least claim 26 of the '360 patent. D.I. 35 ¶ 27. WSOU made no allegations concerning the eligibility of the Asserted Claims in either its Original (D.I. 1) or First Amended Complaints, including any allegations about non-conventionality of any of the recited limitations.

WSOU identified no claim term of the '360 patent for construction. Ex. C (1/6/21 WSOU Identification of Terms for Construction) at 4. Although Defendants identified several '360 patent claim terms for construction, WSOU contended that plain and ordinary meaning applied to each

of them (even those recited in "means plus function" phrasing). Ex. D (1/20/21 WSOU Preliminary Constructions) at 4–6. In other words, according to WSOU, the claims of the '360 patent involved only terms that were well-known to persons of ordinary skill in the art. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). The Court held a claim construction hearing in May 2021, and issued its claim construction order on May 27, 2021. D.I. 102. As discussed further below (*infra* § IV(A)), the Court's claim construction order and WSOU's own claim construction arguments confirm that the Asserted Claims involve only generic and black-box components functioning in their expected manner.

III. LEGAL STANDARD

Judgment on the Pleadings. As with dismissal under Rule 12(b)(6) of the Federal Rules of Civil Procedure, judgment on the pleadings should be granted under Rule 12(c) if a complaint fails to "plead 'enough facts to state a claim to relief that is plausible on its face." *Doe v. MySpace, Inc.*, 528 F.3d 413, 418 (5th Cir. 2008) (citation omitted). Judgment on the pleadings should be granted where "there are no factual allegations that, taken as true, prevent resolving the [patent] eligibility question as a matter of law." *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 765 (Fed. Cir. 2019) (citation omitted). Indeed, this Court has granted dismissal on the basis of ineligibility where the plaintiff "failed to plead allegations supporting the eligibility of the asserted claims." *Health Discovery Corp. v. Intel Corp.*, 6:20-cv-666-ADA, 2021 WL 6116891, at *12 (W.D. Tex. Dec. 27, 2021).

The Federal Circuit has recognized that patent eligibility "may be, and frequently has been, resolved on a Rule 12(b)(6) or (c) motion," even "before claim construction or significant discovery has commenced" and "based on intrinsic evidence from the specification without need for 'extraneous fact finding outside the record." *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018); *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d

1352, 1360 (Fed. Cir. 2017); *Secured Mail Sols. LLC v. Universal Wilde*, 873 F.3d 905, 912 (Fed. Cir. 2017). This Court has recognized that although "claim construction disputes may bar a patent-eligibility determination at the Rule 12(b)(6) stage," there is no such "impediment" where claim construction has already occurred. *Health Discovery*, 2021 WL 6116891, at *4.

In addition, the Federal Circuit has "established that 'prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence." *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (quoting *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003)). The court likewise has made clear that "conclusory statements regarding eligibility" need not be accepted as true and "d[o] not preclude dismissal." *See, e.g., Cisco Sys., Inc. v. Uniloc 2017 LLC*, 813 F. App'x 495, 498–99 (Fed. Cir. 2020). Finally, the Federal Circuit has held that "a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and the patent specification." *Secured Mail Sols.*, 873 F.3d at 913 (citation omitted).

Patent Eligibility. The legal question of patent eligibility involves a two-step "threshold inquiry." *In re Bilski*, 545 F.3d 943, 950 (2008), *aff'd sub nom. Bilski v. Kappos*, 561 U.S. 593 (2010). Step One asks whether the claims are directed to an ineligible "concept[]," such as an "abstract idea." *Alice*, 134 S. Ct. at 2355. If so, Step Two asks whether the claims involve a specific "inventive concept" that "amounts to significantly more than a patent upon the [abstract idea] itself." *Id*.

IV. THE ASSERTED CLAIMS ARE NOT PATENT-ELIGIBLE

A. The Court's *Markman* Order and WSOU's Arguments at Claim Construction Confirm That the Claims Involve Only Generic and Black-Box Components

As detailed below (infra §§ IV(B)–(C)), the Asserted Claims are not patent-eligible because they are directed to an abstract idea and lack any inventive concept. WSOU's own claim

at claim construction any notion that the claims require anything other than well-known and conventional technology functioning in its routine manner. WSOU repeatedly contended that the claims involve *only* generic or black-box structures used to carry out basic data processing functions. The Court agreed. Thus, according to this Court's *Markman* order and WSOU's own arguments, the claims involve only generic components that are used as intended to implement the abstract idea, and thus lack any inventive concept that could save them from ineligibility.

For instance, claim 1 recites a "detection means for detecting a state of an element" and "means for requesting said scheduler model to pass the status of said element to said monitor." WSOU argued that if 35 U.S.C. § 112, ¶ 6 applies to these terms, the corresponding structure is "module 110, 112, 114, 115, 118, 120, 122, 124, 126, 128, or 130." D.I. 81 at 5; D.I. 91 at 1–5. WSOU disputed Defendants' argument that the terms be further limited to the specific algorithm of "using a programming language interface (PLI) as described in '360 patent, 12:11–41." D.I. 81 at 5; D.I. 91 at 1–5; D.I. 85 at 5. The Court agreed with WSOU, and held that the corresponding structure is merely the "module" mentioned above. D.I. 102 (Claim Construction Order) at 19–20. According to the specification, however, a module is no more than a generic component that merely receives information about the state of a scheduler. *See, e.g.*, Ex. A ('360 patent), 6:62–7:28 (describing "a module . . . for receiving" various information).

In addition, claim 1 recites "comparing means for comparing the detected state with a predetermined state and for outputting the result of the comparison," and claim 21 recites a similar term. WSOU disputed Defendants' argument that the terms are indefinite. D.I. 85 at 5–6. WSOU argued that, instead, if Section 112, ¶ 6 applies, the corresponding structure for these terms is "rule checker 132." *Id.* The Court agreed with WSOU that the terms are not indefinite, and held that

their corresponding structure is "rule checker 132 with set of rules 134." D.I. 102 at 21; *see*, *e.g.*, D.I. 85 at 5–6. The specification, however, makes clear that the rule checker is a generic component that "receive[s] information" about the "status of one or more elements of the scheduler," "compares this information against" a set of abstract rules, and "output[s] the result of the comparison." Ex. A ('360 patent), 7:28–39.

Furthermore, several Asserted Claims, such as claims 1 and 26 (and their dependent claims), recite an "element" for "recording" or "identifying" information, such as "whether a queue is empty or occupied" and the amount of data in a queue. Although the Court did not construe these terms based on the Court's term limits, WSOU agreed with Defendants that if Section 112, ¶ 6 applies to the terms, the corresponding structures are merely generic or black-box structures, such as a "queue status register," "counter," "pointer," and "priority selector." D.I. 85 at 6–8. The specification confirms that each of these generic elements merely performs basic functions such as identifying or recording data. *See, e.g.*, Ex. A ('360 patent), 7:16–21, 8:14–37. WSOU agreed, and added that these generic elements are just "data storage." D.I. 85 at 6–8.

Thus, the Court's *Markman* order and WSOU's own claim construction arguments confirm that the claims involve only generic or black-box components performing routine functions of data processing, require no specific technological improvements, and lack any inventive concept. Accordingly, as detailed below, what is left of the claims is merely an ineligible abstract idea.

B. Alice Step One: The Claims Are Directed to an Abstract Idea

The Asserted Claims are directed to the patent-ineligible abstract idea of comparing a detected state with an expected state for monitoring purposes.

The Step One "directed to" inquiry "ask[s] what the patent asserts to be the *focus* of the claimed advance over the prior art," and whether that focus is on patent-ineligible subject matter, such as an abstract idea. *Yu v. Apple Inc.*, 1 F.4th 1040, 1043 (Fed. Cir. 2021); *Affinity Labs of*

Texas, LLC v. DirecTV, LLC, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (holding that Step One "look[s] at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter"). The Federal Circuit has explained that this determination "must focus on the language of the [a]sserted [c]laims themselves, considered in light of the specification." Yu, 1 F.4th at 1043 (citation omitted).

1. The Claims Are Focused on Monitoring by Comparing Detected and Expected States

The language of the Asserted Claims and the intrinsic record confirm that the "focus of the claimed advance" is no more than the abstract idea of monitoring by comparing an expected state with a detected state. See, e.g., Ex. A ('360 patent), 16:8–12, Title ("Monitor, System and Method for Monitoring Performance of a Scheduler"), Abstract ("monitoring the operation of a scheduler" and "whether the scheduler is operating as intended"), 2:28–3:56 (Summary of Invention) (repeatedly describing the "present invention" as involving "monitoring the operation of a scheduler"). This basic concept has long been applied in many contexts. For instance, doctors compare a patient's temperature ("monitored state") to the normal body temperature of 98.6°F a e.g., id. at 16:8. The specification concedes that "[v]arious methods have been proposed to test the performance of a packet scheduler, either when implemented as a software model . . . or when implemented in hardware." Id. at 1:33-36. In fact, the specification describes an example of a prior art method for monitoring the operation of a scheduler. See, e.g., id. at 1:37–55; Ex. B (U.S. Patent No. 6,173,325), 3:35–38 ("To achieve the foregoing objects, and in accordance with the invention as embodied and broadly described herein a method, computer program product, and system for assessing the performance of a packet scheduler is provided."), 3:39-43 ("The present invention is written to take advantage of existing network performance monitoring tools that are

extensible, such as Netmon. The invention adds to Netmon the ability to get detailed statistics on the specific operation of a Packet Scheduler.").

2. Controlling Authority Establishes That the Claims Are Abstract

The Federal Circuit has held ineligible claims that focused on precisely the same abstract idea of comparing an expected state with a detected state for monitoring purposes. For instance, in *In re Gale*, 856 F. App'x 887, 888–89 (Fed. Cir. 2021), the court held ineligible claims to "monitoring" a "critical test result message management system" by comparing the system's "calculated usage pattern" (a "monitored state") with a "pre-defined usage pattern requirement" (an "expected state"). The claims recited "(1) receiv[ing] critical test result messages with associated timing-related metadata, (2) read[ing] the timing-related metadata, (3) calculat[ing] a usage pattern from the metadata, and (4) *determin[ing] whether the calculated usage pattern [was] compliant by comparing it to a predetermined usage pattern requirement.*" *Id.* at 888. The court held that the claims were "directed to the abstract idea of (1) collecting information (here, receiving messages and reading their metadata), (2) analyzing the information (here, *calculating a usage pattern* and *determining its compliance with a predetermined usage pattern*), and (3) reporting the results." *Id.* at 889.

The Federal Circuit and other courts have repeatedly held ineligible claims focused on this abstract idea of monitoring by comparing or analyzing information. *See, e.g., Elec. Power*, 830 F.3d at 1351–52; *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (claims to "collecting and analyzing information to detect misuse and notifying a user when misuse is detected").² Indeed, the Federal Circuit in numerous instances has held ineligible claims

² See also RDPA, LLC v. Geopath, Inc., 543 F. Supp. 3d 4, 12–13 (S.D.N.Y. 2021) (claims to the use of "monitoring devices" to "determin[e] the demographics of and how often individuals . . . pass predetermined geographic locations" "by comparing . . . geo data representing the movement" of the individuals "with stored data" about the "predetermined geographic locations"); Fitbit Inc.

that involved the collection, analysis, and output of data—not only for monitoring but also for other purposes. *See, e.g., SAP*, 898 F.3d at 1167 (claims to "selecting certain information, analyzing it using mathematical techniques, and reporting or displaying the results of the analysis"); *CardioNet, LLC v. InfoBionic, Inc.*, 816 F. App'x 471, 475 (Fed. Cir. 2020) (claims to "collecting, analyzing, and displaying cardiac data"); *Cleveland Clinic Found.*, 859 F.3d at 1358 (stating that comparison of myeloperoxidase levels in the blood with a control value was simply a "bare mental process").

In *Electric Power*, for example, the Federal Circuit held ineligible claims to "systems and methods for performing real-time performance monitoring of an electric power grid" by "receiving" data related to the power grid, "detecting and analyzing events in real-time," and "displaying" the analyses and results of those analyses. *Elec. Power*, 830 F.3d at 1351–52. The Federal Circuit held that the "focus" of the claims was the abstract idea of "collecting information, analyzing it, and displaying certain results of the collection and analysis." *Id.* at 1353. The court explained that "*collecting* information, including when limited to particular content," is "within the realm of abstract ideas." *Id.* The court also held that "*analyzing* information by steps people go through in their minds, or by mathematical algorithms," also is within the "abstract-idea

v. AliphCom, No. 16-cv-00118-BLF, 2017 WL 819235, at *14 (N.D. Cal. Mar. 2, 2017) (claims to "defining a rule . . . , applying that rule to data (comparing the 'predefined threshold' to an 'activity metric' calculated from 'activity data'), and triggering a notification when that rule is satisfied . . . [e.g.,] when the 'activity metric' reaches/exceeds the 'predefined threshold'"); Specialized Monitoring Solutions, LLC v. ADT LLC, 367 F. Supp. 3d 575, 595 (E.D. Tex. 2019) (holding claims that recited the "compari[son of] the magnitude of [a] signal event with a threshold value" as "reflect[ing] the routine practice of monitoring a measured condition to determine if it has exceeded a previously set threshold value"); Neochloris, Inc. v. Emerson Process Mgmt. LLLP, 140 F. Supp. 3d 763, 767, 774 (N.D. Ill. 2015) (claims to "a method for (1) collecting data at a water treatment plant; (2) sending the data over an internet connection to a computer; (3) monitoring and analyzing the data with an ordinary computer and software; and (4) alerting the facility of any abnormalities").

category." *Id.* at 1353–54. Finally, the court held that "merely *presenting the results* of" such "abstract processes" "is abstract as an ancillary part of such collection and analysis." *Id.* at 1354.

Here, the Asserted Claims are directed to the same abstract idea of monitoring and recite the same functions as the ineligible claims in *Gale*, *Electric Power*, and similar cases. Like the ineligible *Gale* claims, which recited monitoring a system by comparing a calculated "usage pattern" of a system (a "monitored state") with a "predetermined usage pattern" (an "expected state"), the Asserted Claims recite monitoring a scheduler by comparing a "monitored state" of scheduler elements with an "expected state." And just as the *Gale* claims recited "reporting the results" of the comparison without specifying what to do with those results, the Asserted Claims recite "outputting the results of the comparison" and nothing more. Merely outputting the results of a comparison is no less abstract than the comparison itself. *Gale*, 856 F. App'x at 889.

In addition, the Asserted Claims involve the same core functions of monitoring that the ineligible claims in *Electric Power* employed. Just like the ineligible *Electric Power* claims, which recited monitoring a power grid by "collecting information," "analyzing information," and "presenting the results" of that analysis, the Asserted Claims recite "*collecting* information" about the operation of a scheduler (the "monitored state" of scheduler elements), "*analyzing* information" (at most, "comparing the monitored state with an expected state" for the scheduler elements), and "*presenting* the results" of that analysis ("outputting the results of the comparison"). 830 F.3d at 1353–54; Ex. A ('360 patent), 16:8–12. As the Federal Circuit explained in *Electric Power*, all of these steps are wholly abstract. 830 F.3d at 1353–54.

3. Nothing in the Claims Can Rescue Them Under Step One

The Asserted Claims recite no subject matter that could save them from ineligibility at Step One. For instance, the Asserted Claims require no specific technological improvements to perform the abstract comparison of detected and expected states to monitor the operation of a computer

generated model of a scheduler. Instead, the claims employ only *preexisting* technology to monitor *preexisting* components. But the Federal Circuit has made clear that, for a claim to be patent-eligible, its "focus" must be on "specific," "non-abstract," and "concrete" "improvements to existing technological processes" and "the functioning of [a] computer itself," rather than merely reciting "a process that qualifies as an abstract idea for which computers are invoked merely as a tool." *Bridge & Post, Inc. v. Verizon Commc'ns, Inc.*, 778 F. App'x 882, 890 (Fed. Cir. 2019); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361–62 (Fed. Cir. 2018); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016); *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1150 (Fed. Cir. 2019). For example, in *Electric Power*, the court reasoned that the claims failed Step One because they recited no "particular assertedly inventive technology for performing" the claimed "functions" of collecting, analyzing, and outputting information. 830 F.3d at 1354.

Here, like the ineligible *Electric Power* claims—as well as the ineligible claims in *Gale*, *FairWarning*, *SAP*, and similar cases—the Asserted Claims fail to recite "any particular asserted inventive technology for performing th[e] functions" of collecting, analyzing, and outputting information to monitor scheduler operation. *Elec. Power*, 830 F.3d at 1354; *Gale*, 856 F. App'x at 890; *FairWarning*, 839 F.3d at 1094–95; *SAP*, 898 F.3d at 1168. Claim 26 and its dependent claims recite no components whatsoever to perform the steps of "monitoring," "comparing," and "outputting," or explain precisely *who* or *what* must perform those basic functions. Although other claims, such as claim 1, recite a "monitor," the specification admits that the monitor "may be implemented on a computer *using any suitable* programming language, for example, Specman, Specman Elite, Verilog or C." Ex. A ('360 patent), 7:49–51; *id.* at 12:14–19 ("The scheduler monitor may be implemented using any suitable programming language."). Likewise, as discussed

above, the Court's *Markman* order and WSOU's claim construction arguments only further establish that the claims require no more than generic or black-box components for performing the basic functions of receiving, comparing, or outputting information. *Supra* § IV(A). Indeed, the claims recite no specific requirements for carrying out these basic functions any differently from how a person would do so in their mind or with pencil and paper. The Federal Circuit has made clear that such "a method that can be performed by human thought alone," or "by a human using a pen and paper," "is merely an abstract idea and is not patent-eligible under § 101." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011); *Elec. Power*, 830 F.3d at 1354.

Furthermore, the Asserted Claims invoke purely functional claim language to implement the abstract idea. The Federal Circuit has held ineligible similar claims that "fail[] to recite a practical way of applying an underlying idea . . . [and] instead [a]re drafted in such a result-oriented way that they amount[] to encompassing 'the principle in the abstract' no matter how implemented." *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1343 (Fed. Cir. 2018). The court has noted that this "essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101." *Elec. Power*, 830 F.3d at 1356. For example, in *Two-Way Media Limited v. Comcast Cable Communications*, the court held ineligible claims that "require[d] the functional results of 'converting,' 'routing,' 'controlling,' 'monitoring,' and 'accumulating records,' but d[id] not sufficiently describe how to achieve these results in a non-abstract way." 874 F.3d 1329, 1337 (Fed. Cir. 2017).

Here, the Asserted Claims similarly recite only purely functional terms like "monitoring," "comparing," and "outputting" to carry out the abstract idea of monitoring. As discussed above, however, the claims lack any limitation specifying *how* to perform those functions and "achieve

th[o]se results in a non-abstract way." *Id.* At best, the claims end with "outputting" the results of the comparison, without specifying where the results are sent or what to do with the information. Thus, the claims are "drafted in such a result-oriented way that they amount[] to encompassing" the abstract idea of "monitoring" by "comparing" expected and monitored states, "no matter how implemented." *Interval Licensing*, 896 F.3d at 1343.

Accordingly, the Asserted Claims are directed to nothing more than the ineligible abstract idea of comparing a detected state and an expected state for monitoring purposes.

C. Alice Step Two: The Claims Lack an Inventive Concept

If claims are directed to an abstract idea, they must add an "inventive concept" by reciting elements that amount to "significantly more than a patent upon the [abstract idea] itself." *Alice*, 134 S. Ct. at 2355. "[C]onventional, routine and well understood applications in the art" are insufficient. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1378 (Fed. Cir. 2015). Like Step One, Step Two of the eligibility inquiry "must focus on the language of the Asserted Claims themselves." *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016). Thus, any features not recited in the claims "are irrelevant" to either step of the "*Mayo/Alice* analysis." *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1293 (Fed. Cir. 2020).

Here, the Asserted Claims lack any inventive concept because they recite only well-known and conventional technology functioning in its routine manner to implement the abstract idea in the context of monitoring a software program; here, the "computer generated model" of a scheduler. *See Ariosa*, 788 F.3d at 1378. As discussed above, the claims require no specific technological improvements to perform the claimed functions of "monitoring," "comparing," and "outputting." *Supra* § IV(B)(3). For instance, the specification concedes that the "monitor" recited in certain claims, such as claim 1, can be practically any existing monitor, stating that it "may be implemented on a computer *using any suitable* programming language, for example, Specman,

Specman Elite, Verilog or C." Ex. A ('360 patent), 7:49–52; see also id. at 12:14–19 ("The scheduler monitor may be implemented using any suitable programming language."). In addition, this Court's *Markman* order and WSOU's claim construction arguments make clear that the claims involve only generic, black-box structures like a "module," "rule checker," and "data storage" to carry out the basic functions of receiving, comparing, or outputting information. *Supra* § IV(A). Claim 26 and its dependent claims do not even require any specific components at all, nor do they specify *who* or *what* should even perform the claimed monitoring.

Furthermore, the monitored scheduler itself, which is no more than a basic "computer model" "simulated in software using" known code and programming language, is not improved or even modified—in any manner. Ex. A ('360 patent), 4:5–9. Indeed, the claims at best end with "outputting the results of the comparison" between the "expected" and "monitored" states, and say nothing about what to do with those results—with respect to the scheduler or anything else. The intrinsic record, including the specification and several prior art references cited on the face of the '360 patent, confirms that the recited scheduler itself and its functions are nothing new. *Id.* at 1:13-55. For instance, the specification even concedes that schedulers previously had been "implemented" and "test[ed]" "as a software model." Id. at 1:33-36; see also id. at 1:56-2:8. In addition, U.S. Patent No. 6,028,847, which is cited on the face of the '360 patent, confirms that a scheduler was known to "identif[y]" and "compute" "the desired time of departure of each data packet." Ex. E (U.S. Patent No. 6,028,847), 2:11-14, 5:49-65. Likewise, U.S. Patent No. 6,018,527 is cited on the face of the '360 patent and describes a scheduler that is responsible for "schedul[ing] a queue for service" and selecting the queues from which data will be output. Ex. F (U.S. Patent No. 6,018,527), 3:13-19. Yet another prior art reference cited on the face of the '360 patent is U.S. Patent No. 6,449,255, which discloses a scheduler that itself "transmits packets . . .

from the queue structure . . . back into the network." Ex. G (U.S. Patent No. 6,449,255) 7:9–15; *id.* at 7:55–59 ("[D]uring normal operation, the traffic monitor 26 observes packets 14 as they are transmitted from the output scheduler 24, and updates the counters 46,48 such that they indicate the observed network traffic leaving the data communications device 10."); *id.* at 6:21–39 (disclosing a scheduler that tracks and "adjusts sizes of . . . queues").

The language of the Asserted Claims itself confirms that, whether their respective elements are considered individually or as an ordered combination, none of the claims recite an inventive concept. *Alice*, 134 S. Ct. at 2355. As explained above, independent claim 26 recites no components at all—let alone specifically improved ones—to perform the abstract idea. WSOU also asserts claims 28, 29, 41, 43, and 44, which ultimately depend from claim 26 and likewise recite no inventive concept.

Claims 28 and 29 are directed to the same process of monitoring scheduler operation, and recite no specific technological improvements to achieve that goal. Instead, they merely recite "monitoring a parameter relating to the operation of said scheduler" and "determining an expected value" for the parameter, which the specification treats as materially the same as a preexisting scheduler "element." Ex. A ('360 patent), 6:62–7:3, 16:30–39. This is precisely the same abstract idea that is insufficient for an inventive concept. BSG Tech LLC v. Buyseasons, Inc., 899 F.3d 1281, 1290 (Fed. Cir. 2018) ("It has been clear since Alice that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept.").

Claim 41 simply adds "monitoring" a parameter relating to scheduler operation at "successive times," but recites no specific technological improvements to do so in that manner. Ex. A ('360 patent), 18:3–6. Again, this claim is directed to the same ineligible abstract idea that

is entirely inadequate for an inventive concept. See BSG, 899 F.3d at 1290.

Claim 43 recites that the "step of monitoring the state of an element" of a scheduler involves "pass[ing] the state of said element to said monitor," even though no "monitor" is previously recited in claim 43 or independent claim 26. Ex. A ('360 patent), 18:12–15. The specification concedes that a preexisting "program language interface (PLI)" can be used for this known purpose. Id. at 12:14–26. Transmitting such information amounts to no more than the basic "data-related function" of sending data, which is entirely insufficient for an inventive concept. In re Rosenberg, 813 F. App'x 594, 598 (Fed. Cir. 2020) (holding that "data-related functions," such as "collecting,' 'electronically transmitting,' 'checking,' and 'electronically reporting the data" "fail[ed] to provide any transformative inventive concept."); WhitServe LLC v. Dropbox, Inc., 854 F. App'x 367, 372 (Fed. Cir. 2021) ("not[ing] that 'sending and receiving information" has been held inadequate for an inventive concept); Dropbox, Inc. v. Synchronoss Techs., Inc., 815 F. App'x 529, 537 (Fed. Cir. 2020) (holding that "formatting' data, 'tagging' data, 'transmitting' data, and 'retrieving' data are generalized steps to be performed on a computer" that do not "yield an inventive concept").

Claim 44 recites that the "computer generated model" of the monitored scheduler "comprises a file containing a functional description of" a scheduler "element." Again, though, merely reciting a data file that describes a scheduler element involves nothing more than the basic function and purpose of such a data file. See, e.g., Rosenberg, 813 F. App'x at 598; Dropbox, 815 F. App'x at 537; Solutran, Inc. v. Elavon, Inc., 931 F.3d 1161, 1164 (Fed. Cir. 2019) (holding ineligible claims involving "data file[s]" that contained certain information).

Furthermore, WSOU asserts claims 1, 2, and 21–23, which recite a "monitor" that performs the same monitoring functions. But, as explained above, the specification concedes that the

"monitor may be implemented on a computer using any suitable programming language, for example, Specman, Specman Elite, Verilog or C." Ex. A ('360 patent), 7:49–51, 12:14–19.

Claim 1 is directed to the same abstract idea of monitoring as claim 26, and involves the same comparison of monitored ("detected") and expected ("predetermined") states. *Id.* at 13:9–26; *BSG*, 899 F.3d at 1290. Claim 1 also recites a "detection means for detecting a state of an element of said scheduler" and "comparing means for comparing the detected state with a predetermined state for said element and for outputting the result of the comparison" to perform the same functions at issue in claim 26. Under this Court's *Markman* order and according to WSOU's own claim construction arguments, however, these means-plus-function terms involve *only* generic, black-box structures. *Supra* § IV(A). And, in any event, these functions are basic "data-related functions" that fail to confer any inventive concept. *Rosenberg*, 813 F. App'x at 598.

Claim 2 depends from claim 1 and adds "pointers" used to identify a "queue from which data is to be output." Ex. A ('360 patent), 13:27–32. The '360 patent does not purport to have invented "pointers," however, and the patent even cites on its face prior art references describing the use of pointers for this same basic purpose. See, e.g., Ex. E (U.S. Patent No. 6,028,847), 5:30–65 (detailing the use of "pointers," including "data pointers" that "represent[] data indicative of the next desired output data packet departure time"). And, again, these are basic "data-related functions" that are insufficient for an inventive concept. Rosenberg, 813 F. App'x at 598.

Claim 21 recites performing the same comparison of "detected" and "expected states" at "different times," but requires no specifically improved technology to do so. Ex. A ('360 patent), 15:32–41. Yet again, this claim is directed to the same ineligible abstract idea that is entirely inadequate for an inventive concept. See BSG, 899 F.3d at 1290.

Finally, claims 22 and 23 ultimately depend from claim 21, and thus are directed to the

same ineligible abstract idea. *See id. Claim 22* recites that the monitored scheduler performs its typical function of selecting "queues for cell departure from a plurality of different groups of queues." *Claim 23* involves monitoring that basic scheduler function (in claim 22) over a "predetermined period of time" with "said detector," even though no "detector" is previously recited in the claim, the other claims from which it depends, or anywhere else in the patent. Ex. A ('360 patent), 15:42–53. These claims therefore merely describe monitoring known scheduler functions and require no specific technological improvements to achieve that goal.

Thus, the claims employ only well-known technology functioning in its routine manner to implement the abstract idea of monitoring the operation of a scheduler. WSOU has offered no contrary allegations in its Original or First Amended Complaints. In fact, WSOU provided no allegations or facts concerning patent eligibility at all in either complaint. *See Health Discovery*, 2021 WL 6116891, at *12 (granting dismissal on the basis of ineligibility where the "complaint fail[ed] to allege an inventive concept"). Accordingly, because the claims are directed to no more than an abstract idea without any inventive concept, the claims are not patent-eligible and judgment on the pleadings should be granted on that basis.

V. CONCLUSION

For the foregoing reasons, Defendants respectfully ask the Court to hold that the Asserted Claims are not patent-eligible under 35 U.S.C. § 101, and therefore grant judgment on the pleadings in Defendants' favor and dismiss the First Amended Complaint with prejudice.

Dated: March 23, 2022 By: /s/ Barry K. Shelton

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on March 23, 2022, I caused the preceding document to be served on all counsel through the Court's ECF system.

/s/ Barry K. Shelton
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